

63.01
Canada
1898-1899

U. S.

Department of Agriculture

EIGHTEEN HUNDRED
AND NINETY-EIGHT

Cannas,
Gladioli,
Clivias.

H. H. GROFF, SIMCOE,
ONTARIO, CANADA.

Reformer Job Print, Simcoe.

The Canadian Horticulturist

and..

Fruit Growers'
Guide.

Contains 

NEWS OF APPLE MARKETS.
ALL ABOUT THE NEW FRUITS.
HUMBUGS EXPOSED.
HOW TO GROW FRUIT, ETC.

The Leading Horticultural Paper
of Canada.

Every subscriber Receives Free a bound copy of the
Annual Report of the Ontario Fruit Growers' Association,
of Ontario Fruit Experiment Stations, and the
Ontario Entomological Society.

Subscription \$1 Per Annum.

SAMPLE COPY FREE.

Address:

L. WOOLVERTON, 

Secretary of the Ontario Fruit
Growers' Association.

GRIMSBY, - ONTARIO, - CANADA.

Introductory.



THIS Catalogue presents to the progressive amateur as well as the scientist the most valuable varieties, collections, and mixtures, offered in the world. The mixtures are prepared by me, and many of them cannot be obtained elsewhere. They are selected with the view of giving the critical grower unequalled value and satisfaction.

The brief cultural instructions condensed herein, are sufficient for general use. Special conditions of soil and climate should be made the subject of correspondence.

Varieties of the *Gladiolus* are now numbered by thousands, but comparatively few possesses sufficient vitality to reproduce characteristic flowers; the same may be said of self fertilized seedlings. This makes my selected collections of special value and advantage to the buyer, and not afforded by any other grower. The process of selection also assures the best possible results in the hybridized seedlings listed herein.

My Hybridized *Gladiolus* Seed will be offered this year by H. A. Dreer, Philadelphia; D. M. Ferry & Co., Detroit; Peter Henderson & Co., New York; F. C. Smith, Yalumba, Australia; J. C. Vaughan, Chicago.

The only bulbs sent out are first quality old, and blooming size bulblet grown. The latter are the best value and produce the finest flowers this season. These and smaller size are kept for my own growing, in preference to the largest matured corms. No second size or cull old bulbs are sent out at any price—they never give satisfaction.

Those who have failed to succeed with stock furnished by me, will please report the same; and if due to any cause under my control I shall be glad to make it good, as before increasing the number of my correspondents, it is my wish to assure satisfaction and value to those who have favored me with their orders. Satisfaction is guaranteed as to quality of stock furnished. No guarantee other than that stock is true to name, is given as to results, these being practically under control of the grower.

The question of distinguishing names for plants is being discussed by the profession, the use of the names of friends and public characters

has been found objectionable, as owing to the rapid improvement in varieties, a few seasons sees them superseded, the compliment thus becomes a doubtful one and cannot be repeated. These are my reasons for numbering varieties introduced by me, with the effect of localizing both their origin and its responsibility.

Visitors are always welcome, but it must be remembered that my place is more of a work-shop than a show-room. All *Gladiolus* bloom is cut daily, excepting those used for seed raising, and these are more or less mutilated during the operation of crossing. Visitors from a distance will be met at their trains if due notice is given.

HORTICULTURAL SOCIETIES will receive most liberal treatment. No other grower can furnish the diversity and high quality obtainable through my lists. Not only are my selections eminently calculated to inform and educate, which is the mission of Societies, but the lower grades contain material for exhibition purposes unequalled in commerce, and they have been successful in competition with the largest U. S. growers in their own country. Societies should correspond direct. Members will be welcome at my exhibit at Toronto Exposition in September.

THE TRADE. While I issue no trade list, my surplus in any line is eagerly sought for by the trade, particularly that of the United States, where the bulk has formerly been secured. Florists, seedsmen, gardeners, and nurserymen, will be supplied at best current rates.

TERMS—CASH. Cheques on local banks must have exchange added. Canadian and United States postage will be accepted in small sums. No charge is made for packing.

NEW UNITED STATES TARIFF. Bulbs and tubers 25 per cent—flower seeds free. The effect of this duty will be to lower the U. S. standard for years, as although they produce large quantities, the best value, and quality, must be imported. Varieties of European origin will be furnished by me at introducers' rates. My "Choice Mixed" and "Export Mixed" are over 25 per cent. better value than is offered elsewhere, and my Hybridized *Gladiolus* Seed has no equal in commerce. Please note testimonials from experienced American amateurs and growers, whose names will be furnished if desired for personal reference.

SIMCOE is situated on the north shore of Lake Erie in the Garden of Canada, about 70 miles due west from Buffalo, N.Y.

The natural adaptability of the soil and the climate are unexcelled for the culture of the *Gladiolus*, the corms of which grow clean, strong, and bright, free from all traces of disease or weakness.

Experience has convinced me that our bright, clear atmosphere

and stimulating climate tend to develop more desirable qualities for reproduction, than can be expected to appear from sections where extremes of heat or moisture prevail.

My product is grown on four blocks of soil, each of a distinct character, and during the yearly stages of its development it is transferred to the one likely to produce the most favorable results.

In order to assure even development, the whole is supplied with a complete system of irrigation, and being well drained, the conditions are under the most absolute control practicable, thus avoiding all extremes tending to produce intermittent and undesirable growth.

TESTED COLLECTIONS. My leading specialty is furnishing the amateur with tested collections of the choicest named varieties, and a few unknown to general commerce. Having become familiar with the most desirable varieties, which must include as a first quality those of sufficient vitality for satisfactory reproduction, these only are increased by me by importation and propagation, without regard to first cost.

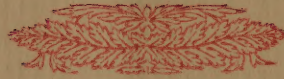
No other grower or dealer has thrown his personal productions into even competition with the world's highest proven quality as the standard.

The claim that varieties are indescribable by pen or painter's brush is true in a different sense from that to which it is usually applied; it is a fact; the most elaborate detail and colored plates have always failed in directing my selection, and if this is my experience as a specialist, how much more does it refer to the average buyer who really does not know the flower. You are sure to lose if attempting to select without thorough and expensive test. On the other hand your position is safeguarded by my system in a manner not afforded elsewhere—my reputation being at stake to the limit of the effect of unfavorable climatic conditions and individual culture, over which I have no control.

The above will explain why valuable space is not used in descriptive detail that fails to portray the variety appearing under cultivation. Those who know do not need it, and those who do not should make their requirement the subject of correspondence, giving the names of those varieties they have grown.

Special collections, colors and hybrids will be furnished those desiring them on application, also a few of the following species: *Adlami*, *Aurantiacus*, *Cooperi*, *Cruentus*, *Dracocephalus*, *Eckloni*, *Floribundus*, *Ludwigii*, *Leichtlini*, *Oppositiflorus*, *Psittacinus*, *Papilio*, *Purpureo-auratus* and *Sandersonii*. Hybrids of the early flowering species, *Cuspidatus*, *Ludovicianus*, *Segetum*, *Trimaculatus* and *Vinulus*, may also be obtained.

The absence of any variety from my lists can be satisfactorily explained.



Extract from "Hybridizing"—"Although it is well known that selection is the great force in improvement, too many professional growers are content with selecting the seed parent only; and the credit they would like to take, for this care and enterprise would make them the subjects of ridicule, with those who are improving by selection, all useful forms in the animal kingdom." ❖ ❖ ❖ ❖ H. H. Groff, before Waterloo Horticultural Society, and Provincial Association of Fruit Growers.



The Gladiolus.



N the whole range of the floral kingdom there is no flower of such easy culture, embracing the great range of color with endless combinations and variety, to equal the Gladiolus. Although called the peoples' flower, it to-day is practically unknown to both the amateur and average grower, and I claim for the newer hybrids greater beauty and more exquisite coloring than in any other garden ornament. Even the orchid fails to equal it, excepting in durability as a cut flower, and here the Gladiolus excels all others.

For the best results, cut the spike when the first flower opens and bloom in the house, this treatment is also beneficial to the bulb.

Plant in full exposure to the sun, in any well enriched garden soil avoiding contact with manure, which should never be fresh. Where soil is stiff clay, fill the drill with sandy loam—water when necessary during the early stages of growth and again when buds show color. The bulbs may be planted in double rows, two inches apart in a four inch drill, four inches deep. Here we plant from the middle of April to the middle of May, and with all sections and sizes, bloom is continuous from the end of July until frost.

Dig before the ground freezes, cut off the stalk close to the bulb and store in a cool dry place. The old bulb, or more properly speaking, corm, may be removed a few weeks later when convenient. The process of acclimatation of foreign varieties is not only an advantage to the grower on this continent, but the beneficial effects of culture in our stimulating northern atmosphere will be more apparent when both bulbs and seeds are developed in the more genial and humid climates of Australia, Great Britain and New Zealand.

Extract from "Hybridizing."

"You will expect me to speak to you to-night, of that border-land of mystery, where man is permitted to join hands with the Great Creator of the Universe, in guiding those forces of which he knows so little; until the highest flights of human fancy, picturing seeming impossibility, in exquisite beauty, and never-ending variation in form and color, sink into comparative insignificance, as the veil is slowly lifted before our expectant and wondering gaze."

H. H. GROFF.

Before Waterloo Horticultural Society, and
Provincial Association of Fruit Growers.



"It is my belief that the art of cultivating flowers, must be regarded as none the less important, than the art of sculpture or painting; because the flowers form the most beautiful part of nature."

—HENRY IZAWA.

—

"We now understand that crossing is good for the species; because it constantly re-vitalizes offspring with the strongest traits of the parents, and ever presents new combinations. But crossing alone can accomplish comparatively little, the chief power in the progression of plants is selection; the force which augments, developes, and fixes types, and we must constantly select the best, in order to make any advancement."

—BAILEY.

—

"We are now standing just at the gateway of scientific horticulture; only have been a few steps in the measureless fields, which will stretch out as we advance into the golden sunshine of a more complete knowledge of the forces which are to unfold all the graceful forms of garden beauty and wealth of fruit, and flowers."

—BURBANK.

Gandavensis Novelties, 1898.

	Each.
AMERIQUE—Cinibar red, striped red brown	\$1 50
BEAUTE DE JUILLET—Salmon rose, striped slaty violet	2 00
BRUTUS—Rich crimson	1 25
DESCARTES—Carmine, shaded darker	1 25
DIOGENE—Lilac rose, flamed carmine	2 00
FAUSTINE—Lilac rose, crimson blotch	1 25
FEDORA—Rose, shaded lilac, white blotch	1 25
MARECHAL NEIL—Claret red, white blotch	1 50
ODALISQUE—Pale yellow, violet blotch	1 25
OLGA—Rose white, pale yellow blotch	1 25
PHILIPPE-AUGUSTE—Salmon rose, white blotch	2 00
PLUTARQUE—Crimson red, white blotch	2 00
ROBERT-LE-DIABLE—Slaty rose	1 25
SALOMON—Rose, striped violet	1 25

Lemoinei Novelties, 1898.

	Each.
BELLE ALLIANCE—Pale lilac, stained violet and yellow	\$1 00
COMTE LEONTIEFF—Rose mauve, violet blotch	1 00
CRONSTADT—Violet lilac, crimson centre	1 50
COMTE MOURAWIEFF—Salmon, blotched maroon	1 25
ELDORADO—Yellow, maroon blotch	1 00
FULGURANT—Cinibar red, sulphur centre	1 25
LE POTHUAU—Violet, blotched darker	1 25
MME. JUDIC—Yellow, violet blotch	1 00
MOSCOVITE—Lilac, carmine purple blotch	1 25
MENELIK—Dark maroon	1 00
M. HANOTAUX—Magenta, red blotch	1 25
NEGUS—Violet, blotched violet bronze	1 00
PAUL LEMOINE—Straw white, red blotch	1 25
PETERHOF—Violet, darker blotch	1 50
ROI DE SIAM—Yellow, blotched maroon	1 00
SKOBELLEFF—Lilac white, violet blotch	1 25

Nanceianus Novelties, 1898.

	Each.
ALSACE-LORRAINE—Carmine, centre yellow, dotted red	\$1 00
ANTOINETTE THIRY—Salmon, centre straw, sprinkled carmine	1 50
DR. ZACHARIAS—Orange, red blotch, sprinkled yellow	1 25
FILLE DE L'AIR—Lilac white, centre maroon and yellow	1 25
GENERAL GALLIENI—Orange red, centre dotted purple	1 00
GEORGES FRICK—Crimson, maroon blotch, sprinkled white	1 50
GUSTAVE GRUNERWALD—Cinibar, centre dotted straw and purple	1 25
LE GEANT—Carmine, centre crimson and yellow	1 25
MAXIME CORNU—Carmine rose, centre sprinkled straw	1 50
PREMIER MINISTRE—Magenta carmine, centre cream, spotted purple	1 00
PRESIDENT FAURE—Salmon red, centre stained yellow and maroon	1 50

New and Selected Gandavensis.

	Each.		Each.		Each.
Ali	\$ 25	Fantaisie	\$ 40	Multipliant	\$3 00
Amitie	15	Glaive de feu	25	Mr. Gladstone	15
Angelique	15	G. Tell	40	Mme. de Bermond	1 25
Abricote	75	Ginevra	15	Marie Caroline	75
Andalouse	15	Gallia	15	Marquis de Mores	1 00
Arriere-Garde	40	Gr. a'merveille	50	Menelik	75
Attila	25	Gargantua	40	Mariposa	15
Apollo	50	Gen. du Barail	75	Nuee d'orage	25
Albatros	75	Grandesse	15	Nevada	50
Aldebaran	15	Hebe	1 50	N. de Fontainebleau	25
A. Sorel	50	Homer	15	Oberon	25
Armagnac	1 25	Helle	75	Orme	25
Almee	75	Jubile	15	Osmanli	75
Anita	75	J. L. Toole	15	Olympe	40
Armida	40	Innocence	1 00	Ondine	30
Artaban	40	Ivanhoe	1 25	Panama	15
Acteon	1 25	K. Augusta	25	Pasteur	15
B. B. Coutts	25	Leander	15	Passe Rose	40
Blanc d'ivoire	1 25	L'Unique Violet	25	Paragon	25
Blanc frise	75	L'Ardoisiere	15	Perfection	75
Bellini	25	La Parisienne	50	P. Soleillet	25
Buffalo Bill	15	Liley	25	Prof. Sargent	40
Bayard Taylor	10	La Perle	15	Parure	50
Blanche fleur	1 75	Leviathan	15	Pasquin	15
Canary Bird	15	Liseron	25	Phryne	25
Corsaire	25	LaVille de Caen	1 00	Rajah	75
Cendrillion	15	Le Cid	1 25	Rev. W. Wilks	25
Cte. H. de Choiseul	75	M. Cadeau	40	Reine de l'ete	40
Chicago	40	Mt. Blanc	75	Roi des roses	25
Carmen	40	M. Berger	40	Rosalba	75
Cheri	25	Magnificus	15	Rose des haies	75
Cronstadt	25	Mad. Auber	15	Rosa Bonheur	25
Carmelite	1 50	Mr. Patrick	25	Sunshine	15
Carmine	15	Mrs. Crawford	50	Sunset	15
Cisco	15	Mabel	40	Scaramouche	75
Dr. Bailly	15	Mlle. M. Verdalle	25	Sable	40
Dr. Hogg	15	Michigan	15	Stromboli	40
Diademe	50	Mt. Shasta	15	Thermidor	15
Dr. Omstead	75	Mme. Poiret	25	Tigre	15
Durandel	40	Mrs. Dobree	25	Thais	75
Diamant	15	Mimosa	25	Tigridia	25
Duguesclin	1 50	M. Paladilhe	25	Tournefort	75
Enchanteresse	25	Mahomet	40	Trojan	15
E. Souchet	15	M. M. Mies	25	Toison d'or	1 25
Egle	15	Magenta	25	Tristan	1 25
Edison	40	Mme. P. Palmer	40	The Queen	15
Fantome	40	Mme. Desportes	40	Una	15
Fleur de Lys	50	Magdalena	15	VanDael	75
Formosa	15	Magicien	25	Walkyrie	40
Flora	25	M. Canrobert	40	White Lady	2 00

Over 300 named varieties have been placed in mixture—in the selection of this list—making the best mixture obtainable, and the choicest value in the above collection.

Double Gandavensis.

PRESIDENT DE SEYDEWITZ—Pink flower, more curious than beautiful 50c.

Choice New Nanceianus.

Each.	Each.	Each.
Abbe Roucourt \$ 15	Dr. Jas. Clark \$1 00	Madagascar \$ 40
A. Van den Heede 25	E. Rambert 40	Marengo 50
C. Baltet 20	Emp. Nicholas 1 00	O. J. Quintus 30
Col. Archinard 30	F. Kegeljan 1 00	Pacha 10
Col. Dodds 15	Gen. Saussier 60	Prof. Sargent 10
Canrobert 40	Geo. Paul 30	Peau Rouge 30
Col. Gillon 80	Gen. de Boisdeffre 40	Robt. Lindsay 20
Col. Patry 60	Gen. Duchesne 30	Rubis 70
Capt. Marechand 60	G. A. Kuijk 1 00	Sir T. Lawrence 1 20
Casimir Maistre 25	H. Veitch 15	Soliman 40
C. de Varigny 60	J. Dybowski 15	Tamerlan 40
C. de Bosschere 1 00	J. Gerardin 50	T. S. Moore 40
Cte de Montebello 1 20	Kleber 25	T. Mommsen 40
Dr. Bayol 15	Le Grand Carnot 25	Tragedie 70
Dr. Wittmack 25	Leconte de Lisle 20	Tsarine 1 20
D. Wassilief 40	Massena 25	Walter Scott 80
Dutreuil de Rhins 1 00	M. de Vilmorin 10	

The above are the most beautiful of the Sandersonii hybrids. Note mixture of named Nanceianus not offered elsewhere.

Choice New Lemoinei.

Each.	Each.	Each.
Abbe Froment \$ 10	Cte. Chotek \$ 90	F. de Coulanges \$ 15
Achanti 20	Cte. de Kerchove 75	F. de Lesseps 10
A. Vacquerie 30	Dr. Regel 15	Firmament 15
A. Franck 15	Desaugiers 15	Gil Blas 10
Ad. Humann 20	Dr. Charcot 15	Gen. de Mirabel 15
Adelina Patti 15	Eclipse 60	Goliath 10
Armenien 80	Depute Krantz 20	Grosclaude 15
Acco 15	Deuil de Carnot 20	G. de Maupassant 25
Alice Wilson 10	Domino Rose 15	Gipsy 15
Baron J. Hulot 1 00	Dulcinee 15	Gen. de Nansouty 40
Baronne Staffe 20	E. V. Hallock 15	H. de Vries 30
Col. Coombes 25	Eclaireur 15	H. Moissan 30
Col. Humbert 15	E. Bergerat 15	H. Pessard 30
Command't. Monteil 15	E. Augier 30	H. Renan 30
C. Monet 80	E. P. VanGeert 20	H. Martinet 15
C. Ellis 1 00	Fra Diavolo 70	J. H. Krelage 10

Choice New Lemoinei---Continued.

	Each.		Each.		Each.
J. de Arc.	\$ 20	M. Meline	\$ 20	Rosa Bonheur	\$ 40
J. Dieulafoy	15	M. Vassiliere	15	Spitzberg	15
J. Foussat	15	Mera	15	S. Pellico	10
J. J. Weiss	30	Mlle. M. Galesloot	1 00	Sceptre d'azur	40
J. Develle	25	Mephistopheles	80	Senateur Volland	30
Lacordaire	30	M. Jarry-Desloges	1 00	Sultane	80
L. Claretie	20	Nuee Bleue	20	Stanislas	60
L. Kelway	25	Nebuleuse	20	Schiaparelli	30
Micromegas	25	O. Mirabeau	20	Stamboul	80
M. Micheli	60	O. Metenier	15	S. Buchner	20
M. T. Vannier	20	P. Hariot	20	Tombouctou	20
Marceau	15	P. Loti	80	Tricolore	15
Mme. A. Daudet	15	P. Margueritte	30	Toison d'or	50
Manzoni	10	P. Mimande	15	Uranus	10
M. Deviolaine	30	Prest. Leon Say	15	Venus de Milo	10
Ministre Viger	20	Prof. Le Monnier	15	Voie lactee	80
Mme. Desbordes-		Princesse Altieri	90	Yvette Guilbert	15
Valmore	40	Rev. W. Wilks	20		

The above list has been culled by 150 named varieties.

Named Childsi.

Aurea Superba	Ethel	Old Oxford
Africa	Falconers Favorite	President McKinley
A. H. Goldsmith	Gracilis	Peoria
Allerton	Gov. Saxton	Perfect Beauty
Adolph Close	H. Gilman	Princeton
Ben Hur	Hohokus	Ruby
Beverly	Keokuk	Rosedale
Blue Danube	Kitty Leland	Red Cap
Burlington	Little Violet	Senator Childs
Boston	Livonia	Splendor
Blue Perfection	Little Blush	Saratoga
Brilliant	Lael	Striped Banner
Bessie Tanner	Marguerethe	St. Oscar
Bowdoin	Mrs. Beecher	Savannah
Cumberland	Mrs. La Mance	Sandusky
Columbia	Marginata	Sacramento
Cincinatti	Middleboro'	St. Louis
Daisy Leland	Mrs. N. W. Bird	Torch Light
Dr. Sellew	Mohonk	Turicensis
Dr. Parkhurst	Mottled Gem	Tuxedo
Deborah	Nezinscott	Tinted White
Dexter	Nilo	Variabilis
Eva	N. D. Childs	Wm. Falconer
Exquisite	Newark	Winthrop
Elaborate	Nakomis	Wankescha
Erie	Oddity	Yolande

Any of the above at introducer's price. See special offer of named varieties in mixture.

General Collection.

MIXED GANDAVENSIS, LEMOINE, AMERICAN, AND CHILDSI HYBRIDS	Per 100.
	\$1 00
FINE MIXED—From selected American Hybrids—Choice Child- si Hybrids and 100 Named Lemoine	2 00
CHOICE MIXED—The popular mixture always sold out each sea- son. Selected from White, Yellow, and Salmon and Buff Named Gandavensis, 100 named varieties of Lemoine. Childsi and Nanceianus Hybrids, and California Select, the result of 15 years selection by L. Burbank, also Dr. Van Fleets' Mt. Vernon Hybrids	3 00
EXPORT MIXED—This grand mixture has no equal in commerce and cannot be obtained elsewhere. It is prepared by adding to Choice Mixed as detailed above. Selected Sandersonii Hybrids, Smoky and Sooty Hybrids, Named Mixed Nanceianus, Choice Mixed Named Lemoine, Mixed Named Ganda- vensis, and Mr. Gray's Ingleside Hybrids, all particularized in this list	4 00
MIXED CHILDSI—Original stock of introducer	4 00
NAMED COLLECTIONS OF TESTED VARIETIES, EACH LABELED. Selected from choice Gandavensis, Lemoine, Nan- ceianus, and Childsi, at introducer's rates. Having proven the value of the best Gladioli obtainable, collections of acclimated varieties will be furnish- ed on application. Read paragraph in the intro- duction referring to this leading specialty. Always give the names of those varieties you have grown.	
MIXED NAMED GANDAVENSIS—From 300 named varieties and the only such obtainable	5 00
CHOICE NAMED LEMOINE, MIXED—The highest quality in the world, containing 50 selected varieties, after dis- carding 100 named varieties. Prepared only by me.	5 00
SELECTED NAMED MIXTURE—From 50 Choice Named Lemoine, 300 Named Gandavensis, Named Nanceianus, Named Childsi, and Burbank's formerly named, California Select	5 00
BURBANK'S CALIFORNIA SELECT—"The very finest cream of all I ever produced, my last and best selections" —L. Burbank. The grand quality of these Glad- ioli has created a demand wherever shown. Mr. Burbank's formerly named and numbered collection now owned only by me.	5 00

General Collection---Continued.

		Per doz.
SELECTED SANDERSONII HYBRIDS—Made up from selected named Childsi, and tested hybridized seedlings of Childsi and Nanceianus strains, of equal or greater merit, and embracing many desirable novelties.		5 00
NAMED MIXED CHILDSI—		
50 bulbs, collection of 25 Named Varieties	\$4 00	
100 bulbs, collection of 50 Named Varieties	-	10 00
Each collection guaranteed to contain the above number of varieties.		
HAND HYBRIDIZED SEEDLINGS—From choice selections in Childsi, Lemoine, Nanceianus, Gandavensis, and Burbank strains, about ½ inch in diameter. Many will bloom this season	-	3 00
(200 for \$5.00)—free by mail—read testimonials from experienced growers.		
SEEDLINGS FROM AMERICAN HYBRIDS—Same size as Hybridized Seedlings, 600 for \$5.00, free by mail	-	1 00

Except where stated prices are per express,
25 bulbs at 100 rates.

		Per doz.
CHOICE NAMED COLLECTIONS, EACH LABELLED—From selected Gandavensis, Lemoine, Nanceianus, and Childsi, culled by some 500 named varieties	-	2 00
INGLESIDE HYBRIDS—Originated by Mr. Gray, of California	-	1 00
CHILDSI, NAMED AND LABELED—In 6 varieties	-	1 00
CHILDSI, NAMED AND LABELED—In 12 varieties	-	1 25
CHILDSI, MIXED	-	60
CHOICE NAMED LEMOINE, MIXED	-	75
MIXED NAMED GANDAVENSIS	-	75
CHOICE MIXED	-	50
EXPORT MIXED	-	75
SELECTED NAMED MIXTURE	-	75
BURBANK'S CALIFORNIA SELECT	-	75
MIXED NAMED NANCEIANUS—From 20 varieties—offered for the first time	-	1 00
SMOKY AND SOOTY HYBRIDS	-	1 00

Any special mixture or collection will be prepared
to suit individual requirement.

If required by mail add per doz. U. S. 15c., Canada 5c.; Per 100
Canada 25c.

The Canna.

Never before in the history of the Canna has such assortment, quality, and value, been offered to the amateur.

After testing everything worth growing, and discarding over 100 named varieties, many of which will be in commercial lists for years to come, I offer the following as the most distinct and desirable varieties in cultivation.

The absence of any Canna from this list may be accepted as evidence that it has failed in some important respect, or been superseded in the rapid march of improvement.

The Groff Hybrids are offered beside the latest continental novelties with the assurance of proving experience. The fact that my No. 955 was pronounced first-class, by expert growers of New York and Chicago, and sold, is at least proof that my judgment in selection is severely critical; this being the first and only variety offered by me for trial. This variety will be introduced under name of "Inglewood"—the title of my residential property.

For foliage and flowers the Canna leads all other plants in bedding, returning a maximum percentage of beauty and satisfaction, for a minimum investment of money and trouble.

Dormant tubers when obtainable, are the best value—these should be started before May 1st.

Plant after danger from frost, in open ground. The Canna only demands heat, rich soil, and moisture, for best results; given these, failure is impossible. After first frost, cut off the stalks, and store the clumps in a warm, dry place, watering slightly at intervals to prevent the tubers from shrivelling.

These valuable plants, unequalled for tropical decoration, have advanced more rapidly in popular favor than anything previously introduced, and have become the standard for grand and striking effect in foliage, and unrivalled brilliancy of their now enormous flowers.

The selections offered in the following lists are unexcelled in commerce—not only for diversity, but in quality and value.

New Groff Hybrids for 1898.

These Cannas are not excelled in commerce. The first variety offered to the U. S. trade was pronounced first-class by New York and Chicago experts, and half of stock sold. The entire stock of these novelties is held by me. Selections were made from them when blooming, by an experienced amateur, in preference to the latest Continental varieties. It is admitted that there are few good dark foliage Cannas, and these having been my specialty for years, I have discarded most of those tested by me—they being superseded by my own Hybrids.

962 GROFF	Foliage, dark purple. Orange crimson, darker spotted.
964 GROFF	Foliage, purple. Deep orange crimson, spot darker.
965 GROFF	Foliage, rich plum purple. Orange, carmine border.
967 GROFF	Foliage, black bronze. Solid crimson.
968 GROFF	Foliage, plum purple. Solid crimson, shaded darker.
969 GROFF	Foliage, rich purple. Vermilion orange.
620 GROFF	Intense crimson scarlet, bordered, deep yellow.
	The best gold bordered variety tested by me, \$1.00.
624 GROFF	Rich violet crimson, new color, beautiful.
628 GROFF	Brilliant crimson scarlet, dotted darker, yellow throat, flowers, 7-in. diameter.
646 GROFF	- - - Clear pure yellow, a gem.
659 GROFF	Large flowers, deep pumpkin yellow, spotted orange, striking and distinct.

Price, except 620, each 50c., the collection \$5.00.

Free by mail dormant—plants per express.

Novelties for 1898.

A. VAN DEN HEUDE—Saffron, carmine border	- - -	\$1 00
AVANT GARDE—Yellow, spotted carmine	- - -	1 00
BARON DE BELLROCHE—Bright amaranth	- - -	1 00
DEPUTE RAVARIN—Deep garnet	- - -	1 00
FURST HOHENLOHE—Lemon yellow, inferior petal, marked carmine	- - -	75
JOS. COMBET—Cardinal, shaded maroon	- - -	75
LOUIS VORAZ—Deep salmon	- - -	1 00
MME. LEON LECLERC—Red, corded yellow	- - -	1 00
MME. SALLIER—Citron, carmine lines	- - -	75
MME. FAVRICHON—Bright vermilion	- - -	1 00
PREST. MAX MICHELLI—Clouded purple	- - -	75
PAUL MEYLAN—Orange red, yellow border	- - -	50
ROBT. OWEN—Yellow, lower petal marked red	- - -	50
R. PEARSON—Yellow, spotted maroon	- - -	75
SEMEUR P. SANNIER—Vermilion and carmine	- - -	75
SECRETAIRE CHABANNE—Orange, shaded darker	- - -	1 00
INGLEWOOD—Dark foliage. Intense orange, dotted red	- - -	50

Offered as "955 Groff" last season and withdrawn.

This grand bedding variety will be introduced in U.S. by J. C. Vaughan, Chicago.

Strong plants per express.

New Orchid Flowered Hybrids.

	Each.
AUSTRIA—Yellow, red centre	\$ 10
ASIA—Yellow, scarlet dots	25
AFRICA—Dark foliage. Purple scarlet	50
AMERICA—Dark foliage. Red purple, striped	75
APHRODITE—Yellow, salmon dots	50
ALEMANNIA—Scarlet, yellow border	75
BURBANK—Yellow, red dots	25
ITALIA—Scarlet, yellow border	15

The above collection, one plant of each, for \$3.00, and in addition the new foliage Cannas, John White, and Mr. Burbank's hybrid, Madame Saleroi.

Choice Varieties.

AMI JULES CHRETIEN	- - - - -	Apricot and red
BARONNE DE POILLY	- - - - -	Orange salmon
CZAR ALEX III	- - - - -	Orange carmine
FRANCIS BILLARD	- - - - -	Crimson purple
FRANZ BUCHNER	- - - - -	Orange scarlet, and yellow
HORTENSE BARBEREAU	- - - - -	Cherry red
LEONARD LILLE	- - - - -	Orange
L. B. LEHALLEUR	- - - - -	Carmine red
MADAGASCAR	- - - - -	Yellow, heavily spotted carmine
MLLE. BERRAT	- - - - -	Rosy carmine
MME. SALEROI	- - - - -	Mr. Burbank's new foliage Canna, 8 ft.—grand
PAUL LORENZ	- - - - -	Dark foliage. Blood red
ROI DES ROUGES	- - - - -	Bright red
SOUV DE MME. CROZY	- - - - -	Red, bordered yellow
633 GROFF	- - - - -	Orange scarlet, yellow eye, perfect form, dwarf
637 GROFF	- - - - -	Crimson scarlet, extra substance, dwarf
638 GROFF	- - - - -	Vermilion orange, well rounded petal, dwarf
641 GROFF	- - - - -	Clear yellow, red dots on inferior petal, distinct, dwarf
643 GROFF	- - - - -	Yellow, shaded darker, broad petal, good, dwarf
647 GROFF	- - - - -	Yellow, spotted light orange, fine flower, dwarf

The above dwarf Hybrids are a special strain, they are flowers of great substance, with extra broad and well rounded petals. Splendid border varieties.

Any of the above 25c. each, dormant free by mail. \$2.50 per doz. dormant. Plants 25c. each.

Selected Standards.

AMI P. PEZEUX	-	-	-	-	Pomegranate red
BEAUTE POITEVINA	-	-	-	-	Crimson
CONSTELLATION	-	-	-	-	Salmon, yellow border
COMTE DE BOUCHAUD	-	-	-	-	The best yellow, spotted red
CHICAGO	-	-	-	-	Vermilion, 5 petals
COLUMBIA	-	-	-	-	Crimson
DIRECTEUR ROELTZ	-	-	-	-	Salmon and carmine
FURST BISMARCK	-	-	-	-	Bright crimson
FLAMINGO	-	-	-	-	Crimson
GRAF O DE KERCHOVE	-	-	-	-	Dark foliage. Orange red
ITALIA	-	-	-	-	Orchid flowered. Scarlet, yellow border
JOHN WHITE	-	-	-	-	Variegated foliage
MME. PICHON	-	-	-	-	Lemon, striped red
M. SCHLAGETER	-	-	-	-	Orange scarlet
MME. A. BOUVIER	-	-	-	-	Crimson scarlet, yellow border
MME. MONTEFIORE	-	-	-	-	Yellow, spotted maroon
MME. JEANNE SALLIER	-	-	-	-	Hybrid of Liliflora, 8 ft.
PAPA CANNA	-	-	-	-	Red, shaded vermillion
SOUV. DE JEANNE CHAURE	-	-	-	-	Scarlet, shaded purple
SOUV. DE PREST. CARNOT	-	-	-	-	Dark foliage. Vermilion scarlet
SENORA DELIA MATTE	-	-	-	-	Orange carmine, yellow border
SOUV. DE ANT CROZY	-	-	-	-	Scarlet, yellow border
VICE PREST. LUIZET	-	-	-	-	Cherry red, and carmine
VAN DEN BERG	-	-	-	-	Capucine, yellow border
617 GROFF	-	-	-	-	Rose pink, new color

Any of the above 15c. each, dormant free by mail. \$1.50 per doz. dormant. My selection \$10.00 per 100 dormant, including John White, and Italia. 25 at 100 rate. Plants 15c. each.

General Collection.

ADMIRAL AVELLAN	-	-	-	-	Dark foliage.	Orange scarlet
ALPHONSE BOUVIER	-	-	-	-	-	Crimson
AUSTRIA	-	-	-	-	Orchid flowered.	Yellow, red centre
CAMILLE BERNARDIN	-	-	-	-	-	Salmon
C. HENDERSON	-	-	-	-	-	Crimson
CUBA LIBRE	-	-	-	-	-	Red, yellow edge
ELDORADO	-	-	-	-	-	Yellow, red spots
ETENDARD	-	-	-	-	-	Orange, yellow border
F. VAUGHAN	-	-	-	-	-	Yellow, spotted red
F. L. HARRIS	-	-	-	-	-	Deep blood red
F. R. PIERSON	-	-	-	-	-	Cardinal red
J. D. CABOS	-	-	-	-	Dark foliage.	Apricot orange
MME. CROZY	-	-	-	-	-	Scarlet, yellow border
MME. C. MOLIN	-	-	-	-	-	Crimson
MIDWAY	-	-	-	-	-	Vermilion and crimson
O. MIRBEAU	-	-	-	-	Vermilion, penciled orange and crimson	
P. J. BERCKMANS	-	-	-	-	-	Magenta
QUEEN CHARLOTTE	-	-	-	-	Crimson scarlet, yellow border	
STELLA KANST	-	-	-	-	-	Apricot
612 GROFF	-	-	-	-	Yellow, spotted light red, distinct	
618 GROFF	-	-	-	-	-	Rose pink, new

Any of the above 10c. each dormant, free by mail. \$1.00 per doz. dormant. My selection \$5.00 per 100 dormant, including Austria. 25 at 100 rate. Plants 10c. each.

CHOICE MIXED HYBRIDS dormant per doz. 50c., free by mail. \$3.00 per 100 per express. In Red Shades, Yellow Shades, Dark Foliage, or Mixed. These are excellent value.

Canna Seed.

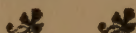
Sow in shallow boxes, as early as possible, giving strong bottom heat. File through the hard shell opposite the germ. Plants should show second leaf, and be ready for potting in about ten days, under favorable treatment.

FROM "CHOICE DARK AND GREEN FOLIAGE NAMED	
VARIETIES, per packet 25 seeds	25c.
FROM SELECTED AND DISTINCT NEW SEEDLINGS, per	
packet 25 seeds	25c.

Cultural instructions on packet.

New Hybrid Clivias.

(*Synonym, IMANTOPHYLLUM.*)



While not intending to add to the number of my specialties, yet growing the Clivia from seed for personal gratification, and knowing its satisfactory character, it is with every confidence that my limited increase is offered at the following prices. It should be in every collection.

STRONG PLANTS in 5-inch pots	-	-	each \$1 00
Should bloom this spring or next.			
LARGE PLANTS in 6 and 7-inch pots	-	-	each \$1 50
Once bloomed.			

The Clivia is a very ornamental house or conservatory plant, with dark evergreen leaves, resembling the Amaryllis Vallota, as do its orange red, and buff flowers, in form and arrangement. They are borne in large umbels, remaining in bloom a long time unless subjected to excessive heat.

Unlike the Amaryllis, the Clivia blooms with unfailing regularity in the spring and early summer, while being an evergreen it is always useful for decorative purposes.

The leaves are about 2 inches wide and two feet in length. The flowers number fifteen to twenty on each stalk, and as the plant increases by offsets these are added to, The offsets may be removed when well rooted, if it is desired to increase the number of plants.

The roots are thick and fleshy like those of the Agapanthus, and their appearing above the soil is not always an indication that repotting is required, which is only necessary at long intervals. The plant will be greatly benefitted by liquid manure during the season of growth.

Winter shady and cool (not under 40°), watering slightly, increase the temperature as spring advances until bloom appears, which, if again kept cool, will last for weeks. Avoid exposing to the direct rays of the sun, as it burns the foliage. Re-pot after blooming when necessary, using rotted sod loam with a little old manure. In the fall, examine the pots and remove angle worms.

During a long and expensive amateur experience testing many plants likely to give practical satisfaction, the Clivia is one of a few that have won a permanent position in my collection.

New Hybrid Gladiolus Seed.

In order that the amateur may understand the possibilities of this seed over any not so prepared, it can be expected that selection of parentage, that great and admitted force in improvement, will insure as a first quality, strength and vigor in the plant.

The pollen and seed parents are selected for their individual merit and adaptability, and every fertilization is a distinct outcross, with the view of producing varieties of materially increased beauty and vitality.

This seed is the product of the past season, and is the highest quality ever offered. Please note the testimonials from experienced growers, as to the result from what was necessarily of lower quality. Every packet is prepared separately, and the seed hand selected. The necessity for selecting plump seed, of more certain germinating qualities, militates somewhat against the prospect of greater diversity and beauty, often resulting from shrivelled and inferior looking seed.

With regard to an apparently unequal proportion of light colors, we are confronted with their greater natural tendency to failure, in comparison to the darker shades, and in using the two sections of Sandersonii hybrids; Nanceianus, and Childsi, containing practically no light colors; the attempt to overcome these objections by crossing, must be uncertain; in view of the admitted greater potency of the red shades, derived so recently from the original species.

Where these crosses have succeeded, their offspring has developed into the most satisfactory and valuable varieties.

To insure perfect germination, although seed must be sown in full exposure to the sun, shade the ground for about three weeks, until the blades appear. Never allow to dry out, before time for digging.

Hybridized Gladiolus Seed.

	Per Pkt.
MIXED LEMOINE, CHILDSI, NANCEIANUS, GANDAVENSIS AND NEW HYBRIDS - - - - -	25c.
SLATE BLUE, SMOKY AND SOOTY HYBRIDS - - - - -	25c.
MR. GRAY'S INGLESIDE HYBRIDS, crossed with choice foreign novelties - - - - -	25c.
CHOICE WHITE AND YELLOW HYBRIDS (25 seeds) - - - - -	25c.
HYBRIDS OF BOTANICAL SPECIES (25 seeds) - - - - -	25c.

Packets contain from 40 to 50 seeds, (except where stated,) hand pollenized and outcrossed. Seed is hand selected, and each packet separately prepared.

The fullest detail of culture on each packet.

Special packets will be prepared if desired.

Testimonials.

"Your Seedling Gladioli excelled anything I have ever produced or bought."

_____,
Originator of Plant Novelties,
Vermont.

"A valuable list."

American Gardening,
New York.

"I have seen a nursery of 30 acres of Gladioli, the largest in England; but nothing there to be compared with Mr. Groff's latest productions; nor in the Royal Botanical, or Kew Gardens."

Woodstock *Sentinel-Review*.

"Your Gladiolus Seed was the best I ever bought."

_____,
Grower, Ohio.

"Your Catalogue was a revelation to me, and Gladioli the cleanest and brightest I ever received. As to the flowers we were satisfied, and more than satisfied. The Dingley Bill will not hurt you."

_____, M.D.,
Colorado.

"Your Gladioli have given every satisfaction."

_____,
Valleyfield, Que.

"I am pleased with the Gladioli you sent me."

President _____ Coal Co.
Troy, N.Y.

"Your Gladioli captured first premium at Ithaca, N.Y. Fair."

_____,
New York State.

"The Gladioli which I got from you were more than satisfactory, they were a complete surprise to me."

Gen. Pass. Agent, _____ R.R.,
Chicago.

Keep this Catalogue—You will need it for future reference.

Some Few of the Things We Talk About.

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------------------|
| A piary | G reenhouses | L andscape Art | R eaders' Notes |
| B ulbs in Garden | G rape Culture | F rom the Cottage | a nd C omments |
| a nd G reenhouse | I ndoors and O ut- | t o the M ansion | R ural I mprove- |
| C urrent Work | d oors | M arket Quotations | m ents |
| A mateur's Guide | H ome Ground | M oney in Small | S mall Fruits |
| i n F ruits, F lowers | H ardy Shrubs | F ruits | S ociety Meetings |
| a nd V egetables | a nd P lants | N ewest Introductions | S trawberries |
| D eveloping | H erbaceous Border | N ursery, T he | S praying M achines |
| L abor-saving | I llustrations | O rnamental | T ree P lanting and |
| D iseases | A ll new and good | G ardening | C ulture |
| E xhibitions | t hings are fully | O rchids, | U seful hints |
| E ntomology | i llustrated | O rchards, T he | O f profit to all |
| F ruits, A ll | I mplements | P oultry, C are of | V egetables |
| F lowers, A ll | I nsecticides | B y one of the best | V ineyard, T he |
| F ertilizers | J ottings of Interest | k nown experts | W indow Gardening |
| F ungicides | a t home and abroad | Q uestions and | F or the L adies |
| A nd how to use | K itchen Garden | A nswers | |
| T hem | E verything in | | |
| F ive Acre Farm | S eason | | |

Valuable Premium Free to Every New Subscriber.

"Intensive Cultivation is the Keynote to Success!"

SUCCESS Waits on all who
Subscribe for...

American Gardening.

\$1.00 a Year. Every Saturday.

A Complete Practical Guide to Every Phase of Plant Culture in the Open and Under Glass and the development of Land and Home Surroundings. **THE SOIL'S PRODUCTIVENESS INCREASED.** Worth \$100. a year and more. The only true guide to successful life in the country. Subscribe and get rich.

It's Your Treatment of the Supposedly "Minor Details" of Cultivation on the Farm and Market Garden which Makes or Mars your Success in Life. No Paper Published in all this Country gives so many Pointers on the "Minor Details" of all Market and Garden Crops as does AMERICAN GARDENING.

TWO CASH PRIZES OFFERED EVERY WEEK.

ONE for Photograph of Well-Grown Plant with Description as to How the Result Shown was Obtained, and ONE for Best Answers to Question Box.

Monthly Prize For Best Essay.

On an Announced Subject of General Interest.

Literary Supplement Monthly.

Special for Advanced Readers.

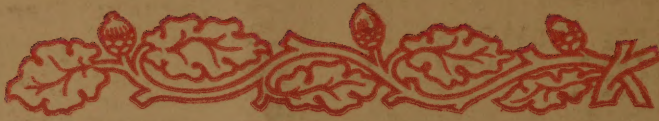
Colored Art Supplement Given Free Every Month,
and numerous other attractions.

Take our advice: **SUBSCRIBE TO AMERICAN GARDENING.**

Do you know of any publication which so thoroughly covers the ground?
Don't fritter away your time and money in worthless reading. Subscribe to a practical gardening publication, admitted by all the standard authority of the age and country.

FREE SAMPLE COPY ON APPLICATION.

Publishers AMERICAN GARDENING, P.O. Box, 1697, New York City.



We believe in specialists ; the man who gives a large amount of his time to one thing learns more about it, and obtains a higher standard than is possible to those who have many irons in the fire.

When a man is familiar with the best that has been produced by others, he is qualified to pass judgment upon anything in that line. He knows what has been done, and what is necessary to improve it—his standard is high.

—M. Crawford.

